

Reaction of Tropylium Salts With Aldehydes

SOV/79-29-9-16/76

were shown to react (under no rigorous conditions) with aldehydes containing α -hydrogens, under the formation of a new C—C bond. There are 4 references, 3 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry of the Academy of Sciences, USSR)

SUBMITTED: August 22, 1958

Card 3/3

5.3400

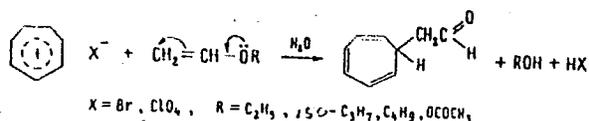
77373
SOV/79-30-1-34/78

AUTHORS: Vol'pin, M. E., Akhrem, I. S., Kursanov, D. N.

TITLE: The Additions of Tropylium Salts to Vinyl Ethers

PERIODICAL: Zhurnal obshechey khimii, 1960, Vol 30, Nr 1, pp 159-163 (USSR)

ABSTRACT: Vinyl ethers vigorously react with tropylium salts.



Tropylium salts react with vinyl ethyl-, vinyl isopropyl-, and vinyl n-butyl ethers in aqueous or in aqueous-alcohol, and only one product, cycloheptatrienylacetaldehyde, is formed. Tropylium bromide reacts similarly with β,β -dimethylvinyl ethyl ether.

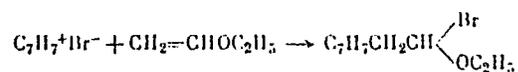
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The Additions of Tropylium Salts to
Vinyl Ethers

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Tropylium bromide with vinyl ethyl ether in anhydrous nitromethane forms a brominated product which could not be isolated, and is probably an α -bromoether.



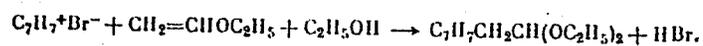
Acetal and acid are formed by the above reaction in anhydrous alcohol. The acid formed complicates the isolation of the acetal.

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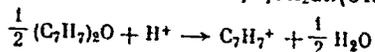
The Additions of Tropylium Salts to
Vinyl Ethers

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An attempt was made to prepare acetals by the reaction of vinyl ethers with ditropyl ether, but this reaction does not take place. The addition of tropylium salts (or an acid) (even in catalytic amounts) initiates a vigorous reaction. Ditropyl ether and vinyl ethyl ether in anhydrous alcohol form diethylacetal of cycloheptatrienylacetaldehyde, in good yield. The same reaction with vinyl butyl ether in anhydrous n-butyl alcohol yields di(n-butyl)acetal of cycloheptatrienylacetaldehyde. Probably an ionic chain reaction takes place in all cases, in which the tropylium cation serves as a carrier.



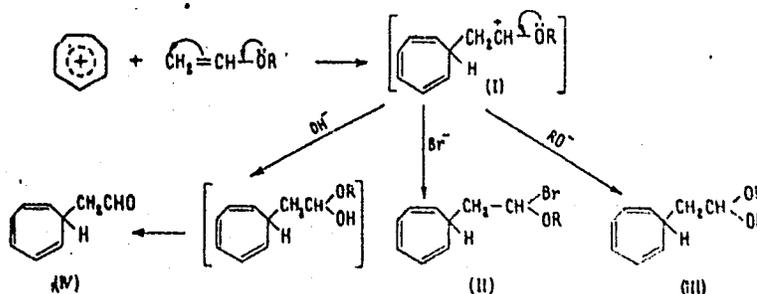
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The Additions of Tropylium Salts to Vinyl Ethers

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It can be assumed that the formation of a carbonium ion of type (I) is an intermediate stage of reaction, and that the above ion in nonhydroxylic solvents is converted into bromoether (II); in alcohol, into acetal (III); and in water, into aldehyde (IV).



Cycloheptatrienylacetaldehyde was obtained in 58% yield, bp 62°/2 mm, n_D²⁰ 1.5340, d₄²⁰ 1.0204; cycloheptatrienyl-iso-butyric aldehyde, in 8.6% yield, bp 76-80°/3 mm,

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n_D^{20} 1.5201; diethyl acetal of cycloheptatrienylacetaldehyde, in 72% bp $102^\circ/5$ mm, n_D^{20} 1.4876; dibutyl acetal of cycloheptatrienylacetaldehyde, in 75%, bp $130^\circ/3$ mm, n_D^{20} 1.4806, d_4^{20} 0.8188; diiso-propyl acetal of cycloheptatrienylacetaldehyde, in 75.6%, bp $96-100^\circ/3$ mm, n_D^{20} 1.4856. There are 4 references, 3 Soviet, 1 U.S. The U.S. reference is: W. E. Doering, L. H. Knox, J. Am. Chem. Soc., 76, 3203 (1954); 79, 352 (1957).

SUBMITTED: January 5, 1959

Card 5/5

S/079/60/030/04/28/080
B001/B016

AUTHORS: Vol'pin, M. Ye., Akhrem, I. S., Kursanov, D. N.
TITLE: Reaction of Tropylium Salts With Compounds Having a
Mobile Hydrogen

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 4, pp. 1187-1190

TEXT: In continuation of their previous papers (Refs. 1, 2), the authors investigated in the present paper the reaction of tropylium bromide with derivatives of carboxylic acids and with ketones. The aliphatic mono-carboxylic acids (acetic, propionic, and butyric acid) and their esters (methyl-, ethyl acetate, ethyl propionate) were found not to react with tropylium salts even on prolonged heating. It is different with compounds in which the mobility of the α -hydrogen atoms is increased by introducing activating substituents. Malonic acid, acetoacetic ester, cyanoacetic ester, and nitro-acetic ester react immediately with the above salts, already at room temperature. In all cases, the corresponding substitution products are obtained, with the cycloheptatrienyl radical being substituted for one hydrogen atom (Scheme 1). Ketones with a

Reaction of Tropylium Salts With Compounds Having a Mobile Hydrogen

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B001/B016

carbonyl group without activating substituents (acetone, acetophenone) enter into reaction with tropylium under far more rigorous conditions. On prolonged heating of the ketones with tropylium bromide, the substitution of the α -hydrogen atom takes place under formation of a monosubstituted product (Scheme 2). The introduction of a second carbonyl group considerably activates the molecule. Thus, acetyl acetone reacts immediately with tropylium salts, already in the cold. When treating tropylium bromide dissolved in water, the dicycloheptatrienyl ester is known to be formed (Ref. 3). The C-O bond in this compound, contrary to the common ethers, is very unstable, and readily breaks when treated with mineral acids to give tropylium salts: ✓

$(C_7H_7)_2O + 2HBr \longrightarrow 2C_7H_7^+Br^- + H_2O$. The ditropylium ether was found to react with acetoacetic ester on heating under formation of the same product as in the reaction of tropylium bromide with acetoacetic ester (Scheme 3). The tropylation reaction may generally be applied to the synthesis of different cycloheptatrienyl derivatives. There are 3 references, 2 of which are Soviet.

Card 2/3

AKHREM, I. S.

Cand Chem Sci - (diss) "Troylation reaction." Moscow, 1961.
12 pp; (Moscow Order of Lenin and Order of Labor Red Banner State
Univ imeni M. V. Lomonosov); 190 copies; free; (KL, 10-61 sup, 206)

VOL'PIN, M.Ye.; AKHREM, I.S.; TERENT'YEVA, Ye.A.; KURSANOV, D.N.

Mechanism of tropylation reaction. Izv.AN SSSR.Otd.khim.nauk
no.5:802-808 My '63. (MIRA 16:8)

1. Institut elementoorganicheskikh soedineniy AN SSSR.
(Tropylium compounds)

VOL'PIN, M.Ye.; AKHREM, I.S.

Light heterolytic rupture of the carbon-carbon bond in cycloheptatriene derivatives. Dokl. AN SSSR 161 no.3:597-600 Mr '65.
(TRA 18:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted September 12, 1964.

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Trudy Omskogo med. in-ta im. Kalinina, No. 10, 1948, p. 7-30

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949)

AKHREM-AKHREMOVICI, R. M.

Akhrem-Akhremovich, R. M. - "The clinical features of double invasion - *Opistorchis felineus* u *Lambliia intestinalis*," Trudy Omskogo med. in-ta Im. Kalinina, No. 10, 1948, p. 43-51

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Akhrem-Akhremovich, R. M. and Putalova, V. I. - "Clinical characteristics of the condition of the cardio-vascular system during brucellosis," In index 2nd author: Putalova, V. P., Trudy Omskogo med. in-ta im. Kalinina, No. 10, 1948, p. 173-97 - Bibliog: 53 items

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SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

AKHREM-AKHREMOVICH, R.M.

AKHREM-AKHREMOVICH, R.M., "Clinical Aspects, Pathogenesis, and Therapy of Omsk Hemorrhagic Fever, IV NSIN (IV Nauchnaya Sessiya Instituta Nevrologii, AMN, SSR, Tezisy Dokladov--- Fourth Scientific Session of the Institute of Neurology, Academy of Medical Sciences USSR, Theses of Reports), 1949.

SO: Voprosy Krayevoy Patologii, Vypusk II. Gemorragicheskaya Likhoradka v Uzbekistane; 1952; Publishing House of the Academy of Sciences Uzbek SSR, 159pp.

W-25668

AKHREM-AKHREMOVICH, R. M.

"Transactions of the Omsk Kalinin Medical Institute," Vest. oto-rino,
14, No.1, 1952. Reviewed by D. Rutenberg

AKHREM-AKHREMOVICH R.M.

5782. Akhrem-Akhremovitch R.M. *The clinical features and treatment of opistorchiasis
KLIN. MED. (Mosk.) 1953, 31/10 (10-16)(Russian text)

The developmental life cycle of *Opistorchis felinus* takes place in the mollusc *Bithynium leachi* and in various Cyprinidae fishes. Man is infected by consumption of raw or half raw fish. The clinical symptoms are variable and not limited to the liver and pancreas, primarily invaded by the parasite. The disease is chronic, lasts several years and is characterized by nausea, intestinal disturbances, epigastric pressure, weakness and subfebrile temperature. The most frequent symptoms were referable to the enlarged liver and gallbladder. In some cases nervous symptoms predominated. Eosinophilia up to 80% was found in the majority of cases. Low blood pressure and bradycardia were characteristic. The cirrhosis of the liver found in sporadic cases of opistorchiasis may offer favourable conditions for the development of primary cancer of the liver. Relatively good results were achieved with intravenous injections of sodium antimony tartrate. Fuadin and hexachlorethan were also tried.

Anigstein - Galveston (XX,6)

SG Excerpta Medica - Section VI Vol. 8 No. 9

AKHREM-AKHREMOVICH, R.M.

Treatment of brucellosis with synthomycin; preliminary data. Ter.
arkh., Moskva 25 no.4:84-88 July-Aug 1953. (GLML 25:4)

1. Professor. 2. Of the Faculty Therapeutic Clinic (Head -- Prof. R. M.
Arkrem-Akhremovich), Omsk Medical Institute imeni M. I. Kalinin.

AKHREM-AKHREMOVICH, R.M., professor.

Clinical state and therapy of opistorchiasis. Klin.med. 31 no.10:10-16 0 '53.
(MLRA 6:11)

1. Iz kafedry fakul'tetskoy terapii (zaveduyushchiy - professor Akhrem-Akhremovich) Omskogo meditsinskogo instituta im. M.I.Kalinina.
(Liver--Diseases) (Worms, Intestinal and parasitic)

AKHREMOVICH, R.M.

VYSOTSKAYA, K.P., dotsent, ispolnyayushchiy obyazannost' zaveduyushchego kafedroy
(Omsk); AKHREMOVICH, R.M., professor, direktor.

Method of preparing and transplanting the wall of the bladder in osteosyn-
thesis, and further observations. Vest.khir. 73 no.3:65-67 My-Je '53.

(MLRA 6:6)

1. Fakul'tetskaya i gospiatal'naya khirurgicheskaya klinika sanitarnogo fa-
kul'teta Omskogo meditsinskogo instituta (for Vysotskaya). 2. Omskiy me-
ditsinskiy institut (for Akhremovich).

(Fractures) (Transplantation (Physiology))

AKHREM-AKHREMOVICH, R.M.

[Clinical aspects, treatment and prevention of opisthorchosis]
Klinika, lechenie i profilaktika opistorkhoza. Omsk, Obl. ki-vo.
1954. 92 p. (MLRA 10:4)
(DISTOMATOSIS)

AKHREM-AKHREMOVICH, Raymond Mikhaylovich

[Clinical forms of brucellosis and their treatment; methodological note] Klinicheskie formy brutselleza i ikh lechenie; metodicheskoe pis'mo. Omsk, 1957. 20 p. (MIRA 13:7)
(BRUCELLOSIS)

AKHREM-AKHREMOVICH, R.M., prof.

Hemorrhagic fever. Trudy OMI no.25:107-116 '59. (MIRA 14:10)

1. Iz kafedry fakul'tetskoy terapii Omskogo meditsinskogo instituta imeni Kalinina, zav. kafedroy prof. R.M.Akhrem-Akhremovich.
(HEMORRHAGIC FEVER)

AKHREM-AKHREMOVICH, Raymond Mikhailovich; RED'KIN, I.Ye., red.;
PETROVA, N.K., tekhn. red.

[Opisthorchosis in man; its clinical aspects, treatment and prevention] Opistorkhoz cheloveka; klinika, lechenie i profilaktika. 2. izd., dop. i perer. Moskva, Medgiz, 1963. 145 p.
(MIRA 16:6)

(LIVER FLUKE)

AKHREM-AKHREMOVICH, R.M.; CHISTYAKOVA, M.A.

Treatment of hypertension with depressin. Terap. arkh. 34
no.12:3-8 D'62. (MIRA 16:6)

1. Iz Instituta terapii (dir. - deystvitel'nyy chlen AMN SSSR
prof. A.L.Myasnikov) AMN SSSR.
(HYPERTENSION) (HEXONIUM)

ACCESSION NR: AT4042705

S/0000/63/000/000/0368/0371

AUTHOR: Myasnikov, A. L.; Akhrem-Akhremovich, R. M.; Kakurin, L. I.; Pushkar¹, Yu. T.; Mukharlyamov, N. M.; Georgiyevskiy, V. S.; Tokarev, Yu. N.; Senkevich, Yu. A.; Katkovskiy, B. S.; Kalinina, A. N.; Cherepakhin, M. A.; Chichkin, V. A.; Filosofov, V. K.; Shamrov, P. G.

TITLE: Effect of prolonged hypokinesia on blood circulation in man

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsonnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy* konferentsii. Moscow, 1963, 368-371

TOPIC TAGS: isolation, prolonged isolation, isolation chamber, isolation effect, bioelectric activity

ABSTRACT: Four young men 22 to 24 were subjected to voluntary bedrest for a period of 20 days. Tests on pulse, arterial pressure, rate of blood flow, venous pressure, etc., were run before and after the completion of the experiment. These tests were performed at rest and after functional exercises (30 knee bends at the rate of one every 1.5 sec). During the period of bedrest, pulse frequency diminished on the average by 14 strokes per minute; the arterial pressure diminish-

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ACCESSION NR. AT4042705

ed by 11.2 mm of Hg. Stroke volume diminished on the average by 6 ml, while the minute rate of blood flow was reduced by 1.6 liters. After completion of the bed regime, pulse frequency rose by 18 to 34 strokes per minute, while systolic pressure and minute blood volume increased. Deep knee bends brought about characteristic increases in the pulse rate and changes in arterial pressure and phases of the cardiac cycle. The length of time required for these indices to return to normal increased from three minutes to seven minutes. It can be assumed that similar functional changes in the cardiovascular system will take place in man after his return to normal gravity following prolonged weightlessness.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: IS

NO REF SOV: 000

OTHER: 00

Card

APROSINA, Z.G., kand. med. nauk; AFANAS'YEVA, K.A., kand. med. nauk;
AKHREM-AKHREMOVICH, R.M., prof.; BLYUGER, A.F., doktor med.
nauk; BONDAR', Z.A., prof.; VASILENKO, V.Kh., prof.; KIKODZE,
I.A., kand. med. nauk; LINDENBRATEN, L.D., prof.; LOGINOV,
A.S., kand. med. nauk; MANSUROV, Kh.Kh., prof.; NAZARETYAN,
Ye.L., kand. med. nauk; NOGALLER, A.M., prof.; PLOTNIKOV,
N.N., prof.; SEMENDYAYEVA, M.Ye., kand. med. nauk; TAREYEV,
Ye.M., prof.; TAREYEV, I.Ye., kand. med. nauk;
TER-GRIGOROVA, Ye.N., prof.; CHERNYSHEVA, Ye.V., kand. med.
nauk; SHVARTS, L.S., prof.; MYASNIKOV, A.L., prof., zam. otv.
red.; BOGOSLAVSKIY, V.A., red.; SEMENDYAYEVA, M.Ye., red.

[Multivolume manual on internal diseases] Mnogotomnoe ruko-
vodstvo po vnutrennim bolezniam. Moskva, Meditsina. Vol.5.
1965. 724 p. (MIRA 18:9)

1. Deystvitel'nyy chlen AMN SSSR (for Tareyev, Ye.M.,
Vasilenko, Myasnikov).

L 7768-65 EWP(k)/EWT(d)/EWT(m) (EWP(h)/EXP(b) (EWA(s)/EWP(l)/EWP(v)/EWP(t)

621.9.048.7

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya. Svodnyy tom, Abs. 4B242

32

AUTHORS: Igudesman, K. Ye.; Akhremovich, N. D.

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... of hard and brittle materials ... with the

... , etc. 4 illustrations. ...

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AUG 1961

Cards 2/2

CHIGIN, V.; AKHREMCHUK, B.; PRISTENNYI, A., shofer; BOYKOV, V., shofer-otlichnik; KHALABUZAR', L.

Drunkards should not drive. Avt. transp. 36 no.9:46 S '58.

(MIRA 11:10)

1. Direktor avtoekspeditsionnoy bazy Dzhahalal-Abadskogo oblpotreboyusa Kirgisskoy SSR (for Chigrin). 2. Nachal'nik Sortaval'skoy avtotransportnoy kontory (for Akhremchuk). 3. Taldy-Kurganskaya avtobaza, Kazakhskaya SSR (for Pristennyi). 4. Lyuberetskaya avtokolonna No.34 (for Boykov). 5. Direktor Mushketovskoy avtobazy avtotresta kombinata "Stalinshakhtstroy" (for Khalabuzar').

(Drinking and traffic accidents)

AKHREMENKO, G.K.; TARUSIN, P.P.

Comments on V.I.Kravchenko's article "Preventing avalanches of entries in flat beds." Bezop.truda v prom. 7 no.2:17-18 F. '63. (MIRA 16:2)

1. Glavnyy inzh. shakhty No.10-bis Donetskogo soveta narodnogo khozyaystva (for Akhremenko). 2. Zamestitel' glavnogo inzhenera po gornym rabotam shakhty No.17-bis Donetskogo soveta narodnogo khozyaystva (for Tarusin).

(Coal mines and mining—Safety measures) (Kravchenko, V.I.)

VENGOREK, V.; AKHREMOVICH, I.; PAVLOVSKIY, Ye. N., akademik.; TERAVSKIY, I. K.

Method of preserving insects in the horse-radish phytoncide for
subsequent manual dissection. Ent. oboz. 37 no. 3:659-660 '58.

(MIRA 11:10)

(Insects--Collection and preservation)

(Horse-radish)

(Phytoncides)

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(Works of the Forset Technology Academy imeni S. M. Kirov), No. 69, pp 19-36, 1950.

SINTSKIY, V.P.; AKHREMOVICH, M.B.

Effect of the fifteen-year tapping on the quality of butt logs.
Gidreliz. i lesokhim.prom. 9 no.6:16-17 '56. (MLRA 9:10)

1. Beloruskiy nauchno-issledovatel'skiy institut lesokhimii.
(Tree tapping) (Wood)

AKHREMOVICH M.B.

DOBROZRKOVA, T.L.; LETOVA, M.F.; STEPANOV, K.M.; KHOKHRYAKOV, M.K.,
doktor biologicheskikh nauk; AKHREMOVICH, M.B., redaktor;
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redaktor

[Catalog of plant diseases] Opredelitel' bolezhei rastenii. Pod red.
M.K.Khokhriakova. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1956. 661 p.
(Plant diseases) (MLRA 10:3)

AKHREMOVICH, M.B.

LOVCHINOVSKAYA, Mariya Yakovlevna; AKHREMOVICH, M.B., redaktor; CHUMAYEVA,
Z.V., tekhnicheskiy redaktor

[Diseases of bees] Bolezni pchel. Izd. 2-oe. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1957. 44 p. (MLRA 10:7)
(Bees--Diseases and pests)

AKHREMOVICH, M.B.

SHAPIRO, Isaak Davidovich; CHUMAKOV, Arkadiy Yevgrafovich; AKHREMOVICH, M.B.,
red.; CHUNAYEVA, Z.V., tekhn.red.

[Protecting forage plants from pests and diseases] Zashchita
kormovykh kol'tu ot vreditel'ei i boleznei. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1957. 278 p. (MIRA 10:12)
(Forage plants--Diseases and pests)

TULINTSEV, Vasilii Georgiyevich; AKHREMOVICH, M.B., red.; VOROB'YEV,
F.I., red.; CHUNAYEVA, Z.V., tekhn.red.

[Principles of landscape gardening] Osnovy dekorativnogo
sadovodstva. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1958. 214 p.
(MIRA 12:3)

(Landscape gardening)

DOBROZRKOVA, Taisiya Leonidovna,; AKHREMOVICH, M.B., red.; MOLODTSOVA,
N.G., tekhn. red.

[Laboratory exercises in phytopathology] Laboratornye zaniatia
po fitopatologii. Izd. 2. Moskva, Gos. izd-vo sel'khoz. lit-ry,
1958. 223 p. (MIRA 11:11)

(Plant diseases)

BEY-BIYENKO, Grigoriy Yakovlevich; SKORIKOVA, Ol'ga Aleksandrovna; AKHREMOVICH,
M.B., red.; CHEKAYEVA, Z.V., tekhn. red.

[Laboratory exercises in entomology] Laboratornye zaniatiia po
entomologii. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 253 p.
(Entomology—laboratory manuals) (MIRA 11:8)

BRYANTSEV, Boris Aleksandrovich; DOBROZRKOVA, Taisiya Leonidovna;
AKHREMOVICH, M.B., red.; CHUNAYEVA, Z.V., tekhn.red.

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ot vreditel'ei i boleznei. Moskva, Gos.izd-vo sel'khoz.lit-ry,
1958. 411 p. (MIRA 12:3)
(Plant diseases) (Agricultural pests)

BEY-BIYENKO, G.Ya.; BERIM, N.G.; BRYANTSEV, B.A., BRYANTSEVA, I.B.;
VOLGIN, V.I.; DANILEVSKIY, A.S.; ZIMIN, L.S.; KOZHANCHIKOV, I.V.;
OSMOLOVSKIY, G.Ye.; RUBTSOV, I.A.; SHEVCHENKO, M.I.; YATSENKO, I.P.;
SHCHEGOLEV, V.N., prof., doktor s.-kh.nauk, red.; AKHREMOVICH, M.B.,
red.; CHUMAYEVA, Z.V., tekhn.red.

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lit-ry, 1958. 631 p. (MIRA 11:12)
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DANILOVA, T.N., kand.tekhn.nauk; ~~AKHREMOVICH, M.B., kand.biolog.nauk;~~
IKONEN, Ye.V.; SEREBROVAYA, I.G.; BAKHTIYAROVA, R.Kh., red.izd-va;
NAZAROVA, A.S., tekhn.red.

[Manual on controlling insects and fungi destroying wooden
construction elements of dwellings] Rukovodstvo po bor'be
s razrushiteliami drevesiny v konstruktsiakh zhilykh zdaniy.
Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1960. 45 p.

(MIRA 14:1)

1. Akademiya kommunal'nogo khozyaystva. Leningradskiy nauchno-
issledovatel'skiy institut. 2. Laboratoriya zashchity derevyannykh
konstruktsiy Leningradskogo nauchno-issledovatel'skogo instituta
Akademii kommunal'nogo khozyaystva (for Danilova, Akhremovich,
Ikonen, Serebrovaya).

(Wood-decaying fungi)

(Wood preservatives)

SHAPIRO, Isaak Davidovich; AKHREMOVICH, M.B., red.; REUTSKAYA, O.Ye.,
red.; BARANOVA, L.G., tekhn. red.

[Swedish fly as a corn pest and measures for its control]
Shvedskaia mukha - vreditel' kukuruzy i mery bor'by s nei.
Leningrad, Sel'khozizdat, 1962. 78 p. (MIRA 15:11)
(Corn (Maize))--Diseases and pests)
(Fruit flies--Extermination)

~~AKHREMOVICH, M.B.~~, kand.biolog.nauk; SVITKIN, M.Z., inzh.

Biologically resistant hardboard from wood chips. Der. prom.
12 no.3:11-12 Mr '63. (MIRA 16:5)
(Hardboard) (Fungi, Wood decaying)

AKHREMOVICH, Marta Bernardovna. Prinsipal uchastiye PERSOV, M.P.;
KARPOV, V.V., kand. tekhn. nauk; OSMOLOVSKIY, G.Ye., red.

[Protection of the wooden structures of dwellings against
wood-destroying pests] Zashchita dereviannykh konstruktsii
zhilykh zdaniy ot razrushitelei drevesiny. Moskva, Stroi-
izdat, 1964. 89 p. (MIRA 17:6)

AKHREMOVICH, M.B.; GENDLINA, L.B.; IKONEN, Ye.V.; SEREBROVA, I.G.

Improving the biological resistance of particle boards and
fiber boards. Nauch. trudy AKKH no.31:111-118 '64.

(MIRA 18:9)

AKHRIYANOVA, A.; GUSEVA, V.; KUTNOVA, R.

Factory conference for the survey of articles of the
"Khimicheskie volokna." Khim.volok. no.5:79 '61. (MIRA 14:10)
(Textile fibers, Synthetic--Periodicals)

AKHROMENKO, F.

Errors that cost the government very much. Okhr. truda i sets.
strakh. no.2:21-24 Ag '58. (MIRA 12:1)
(Latvia--Pensions)

AKHROMENKOV, A. A.

Superfil'try dlia regeneratsii otrabotannykh masel. [Moskva] Gostoptekhizdat,
1945. 24 p. illus.

Superfilters for reclamation of used oils.

DIC: TP687.A3

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library
of Congress, 1953.

AKHROMENKOV, A.A.

Using separators for gradual transfer of petroleum and petroleum products through pipelines. Neft.khoz. 34 no.7:57-62. J1 '56.
(Petroleum--Pipelines) (MLRA 9:10)

KONDUKOV, N.B.; KORNILAYEV, A.N.; AKHROMENKOV, A.A.; SKACHKO, I.M.; KRUGLOV, A.S.

Use of the radiotracer method in studying the parameters of the motion of particles in a fluidized bed. Part 2. Kinematics of the particles. Inzh. fiz. zhur. no.7:25-32 J1 '64. (MIRA 17:10)

1. Institut po pererabotke nefti i Institut khimicheskogo mashinostroyeniya, Moskva.

AKHROMENKOV, A.A.; ZASLAVSKIY, Yu.S.; VARGIN, A.A.; KORNILAYEV, A.N.; LAPIN,
V.P.

Controlling consecutive pumping of petroleum and petroleum products
through pipelines by use of gamma-densitometer. Neft. khoz. 35 no.12:
60-61 D '57. (MIRA 11:2)

(Petroleum--Transportation)
(Gamma rays--Industrial application)

KONDUKOV, N.B.; KORNILAYEV, A.N.; SKACHKO, I.M.; AKHROMENKOV, A.A.;
KRUGLOV, A.S.

Studying the parameters of the motion of particles in a pseudo-
fluidized bed by the radioisotope method. Inzh.-fiz. zhur. 6 no.7:
13-18 J1 '63. (MIRA 16:9)

1. Institut khimicheskogo mashinostroyeniya, Moskva i Institut
neftyanoy promyshlennosti, Moskva.
(Fluidization) (Radioactive tracers)

AKHROMENKOV, A.A.; KRUGLOV, A.S.

Investigating the structure of a fluidized bed by the radioactive method. Khim. i tekh. topl. i masel 9 no.4:61-64 Ap '64.
(MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

AKHROMEYEV, O.M., mashinist-instruktor

Advice pertaining to the maintenance of linear contactors of the
VI23 electric locomotives. Elek.i tepl.tiaga 4 no.2:36-37 F
'60. (MIRA 13:6)

1. Depo Tula, Moskovskaya doroga.
(Electric locomotives) (Electric contactors)

L 37641-66

ACC NR: AP6021824

SOURCE CODE: UR/0413/66/000/012/0120/0120

INVENTOR: Akhromeyev, Zh. P.; Nyrkov, V. I.

21
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B

ORG: none

TITLE: Device for the hermetic joining of two pipelines. Class 47, No. 182988

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 120

TOPIC TAGS: pipeline, hermetic seal

ABSTRACT: An Author Certificate has been issued for a device for joining two pipelines hermetically, which is made in the form of nipples fastened to the pipelines

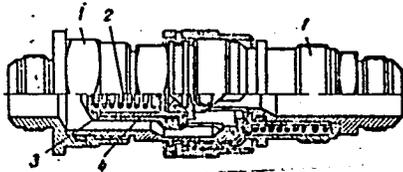


Fig. 1. Device for the hermetic joining of two pipelines.

- 1 - Nipples; 2 - hermetic chamber;
- 3 - cylinder; 4 - shut-off valve rod.

Card 1/2

UDC: 621.643.416

15

Soil structure. A. AKHROMEIKO. Moscow-Leningrad, *Monograph* 1930, 100 pp.
 --A. discusses the INFLUENCE of various types of structure and drying of soil on
 the dynamics of soil processes: water-sol. P₂O₅, water-sol. org. matter, nitrates, pH,
 dispersion, cond., exchange capacity and sterilization and drying. J. S. Joffe

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

GROUPS: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

COMMON ELEMENTS: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

OPEN MATERIALS INDEX

PROCESS AND PROPERTIES INDEX

GENERAL VARIABLES INDEX

PROCESSES AND PROPERTIES 4-13

15

A study of "sick" soils. A. L. AKHROMSKO. *Udobrenia i Urozhai* 3, 617-27 (1931).—Helriegel nutrient soil. was added to podsolic light loam soil to study soil sickness under repeated cropping. There were 6 pots for each crop of oats and wheat. After the crop was harvested the sand was mixed with the stubble and roots, and planted again, each crop being divided into 3 groups of 2 pots each: first with 0.5 N soln., the 2nd with 1.0 N and the 3rd with 1.5 N. The yields in the first group in each case were depressed, while the others developed normally as compared with control pots receiving the same treatment. No nitrate or any other form of sol. N was found in the sand cultures, but in the soil cultures some nitrate and some NH_3 were found. In both cases some P_2O_5 was found and the exts. from the wheat cultures contained twice as much P_2O_5 as the oats cultures. It is concluded that the sol. N deficiency was responsible for the depression in yield. In the first and second crops the N content of the wheat and oats was unchanged, with a higher N content in the wheat. After the second crop more residual org. N was found in all the cultures, presumably present in the roots and in the bodies of the microbial flora. The sol. N applied in small quantities to the second crop was utilized in the process of decomp. the org. residues. Three hundred g. of the sand contg. org. residues and 200 g. of soils from the resp. cultures were composted. Soil cultures were added and the new cultures incubated at 25-30° for varying periods. An aq. ext. 1:5 for the sand and 1:4 for the soil was made and the amts. of P_2O_5 , NO_3 and ammonia N were detd. Soils with the root residues accumulated no nitrate until after 2.5 months of composting; in the controls nitrate accumulated immediately. The microbes utilize all the nitrates as they form from the org. root residues. The data are presented in a series of graphs. Conclusion: No toxic substances are formed to cause so-called soil "sickness," but it is a matter of available plant food. J. S. JORRE

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND INDEXES PROCESSES AND PROPERTIES INDEX 3RD AND 4TH INDEXES

ca 15

Transformations in calcium cyanamide in storage. A. I. АКИМОВИЧ. *Udobreniya Uroshai* 2, 728-38(1931).—CaCN₂ (c. p. or impure), if stored air-dry, if moistened with water, or if raised with soil or sand, takes up moisture amounting to 60% of its weight. The losses of N noted in cyanamide upon storing have been proved to be erroneous. The apparent losses are due to the increase in moisture content and to the absorption of CO₂. Storing CaCN₂ in a moist atm. transforms it primarily into dicyanodiamide and partly into urea. Under air-dry conditions only part of the CaCN₂ is transformed into dicyanodiamide and a very small portion into urea. In comparing the efficiency of CaCN₂ as a fertilizer, consideration has to be given to the fact that because of the process of transformation some of the N becomes unavailable. J. S. J.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

OPEN MATERIALS INDEX PROCESS AND PROPERTIES INDEX

1ST AND 2ND INDEXES PROCESSES AND PROPERTIES INDEX 3RD AND 4TH INDEXES

B-3-1

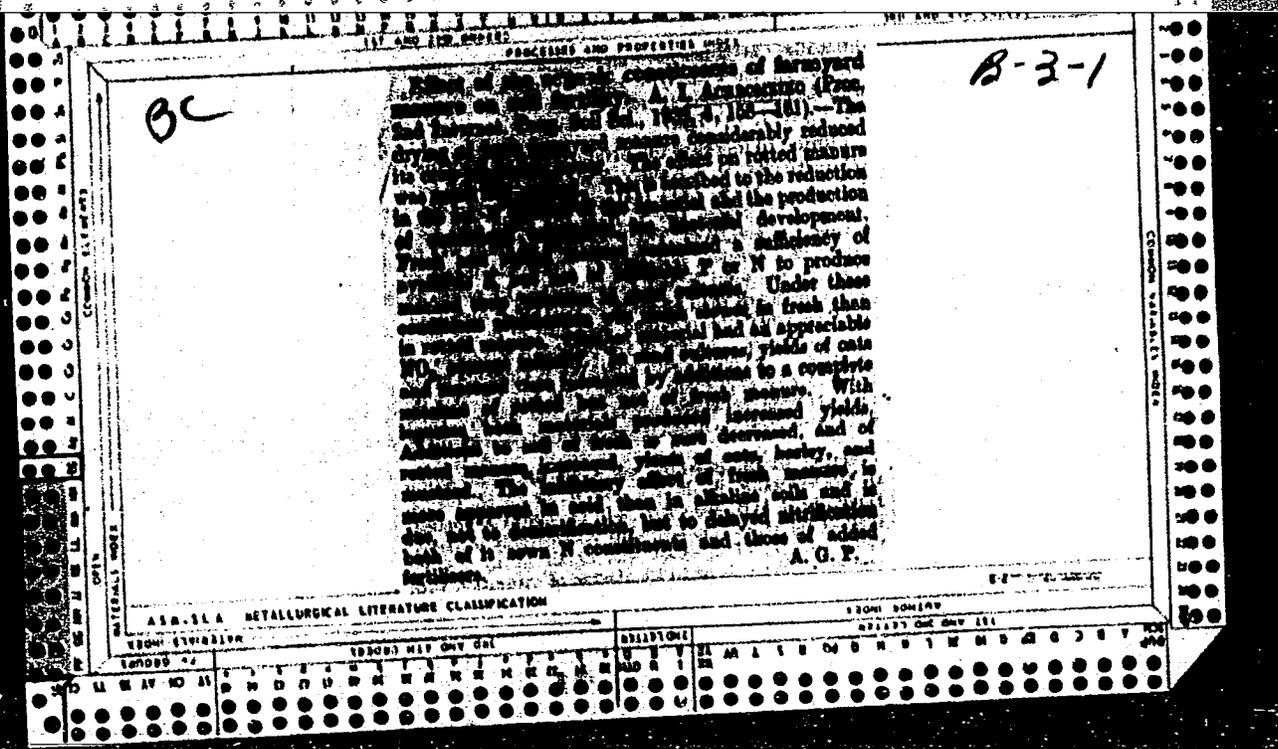
BC

Water properties of soils in relation to their structure and drying. A. J. ACHONIKO (Proc. 2nd Internat. Cong. Soil Sci., 1933, 1, 71-75).—Reduction in the max. H₂O capacity of soils on drying is ascribed to the coagulation of colloids and the formation of aggregate particles, resulting from the increased concn. of electrolytes. Hence, non-capillary porosity increases and capillary porosity decreases. Colloid coagulation following drying also decreases hygroscopicity by lowering the total surface area exposed. Evaporation of H₂O from drying soils occurs in 3 definite stages, viz., 100-60% of the total H₂O capacity, in which powdery and crumb-structured soils show approx. same ratio of evaporation; 60-35%, in which evaporation is faster from powdery soils; and < 35%, in which structural soils show the more rapid evaporation.

A. G. P.

AD-31A METALLURGICAL LITERATURE CLASSIFICATION

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15

PROCESSES AND PROPERTIES INDEX

The changes in calcium cyanamide in storage. A. I. Akhmedov. Trans. Sov. Inst. Fertilizers (Moscow) No. 92, 149-63 (1932).—In storage, $CaCN_2$ increased with wt. 60%. The time of such a wt. increase varied with the humidity. No loss of N takes place. H_2O and CO_2 are responsible for the wt. increase. In a moist atm. $CaCN_2$ is converted chiefly into dicyanodiamide and only slightly into urea. In dry air only a small portion of the $CaCN_2$ is converted into dicyanodiamide. The poor results obtained with $CaCN_2$ are ascribed to the formation of the unavailable dicyanodiamide. For the best results, $CaCN_2$ should not be kept long in storage. J. S. Joffe

METALLURGICAL LITERATURE CLASSIFICATION

RESON BOWIRV

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1ST AND 2ND CODES
PROCESSES AND PROPERTIES INDEX

GA 15

A study of the loss of nitrogen from calcium cyanamide on keeping
A.I. Akhromeiko. J. Chem. Ind. (Moscow) 1935, No. 2, 48-51.-See C.A. 26, 1699.

H.M. Leicester

GENERAL INDEX
METALLURGY
METALLURGICAL LITERATURE CLASSIFICATION

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L 53865-65 EWT(m)/EWP(t)/EWP(b) Feb DIAAP JD
ACCESSION NR: AP5017241

30
23

TITLE: Study of the parameters of particle motion in a fluidized bed by the radioisotope method. II. Particle kinematics

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 7, 1964, 25-32

TOPIC TAGS: particle motion, fluid mechanics, chemical labelling, radioisotope

ABSTRACT: This paper presents an analysis of the results of an experiment on the motion of particles in a fluidized bed. The authors determine the kinematic parameters of the particles in the bed by the radioisotope method. The results are given showing the dependence of the parameters on the bed height and the particle size. The particles in the bed are obtained by the method of the authors. The results of the experiment are given in the method. (Sip. art. 666: 2 graphs.)

Card 1/2

L 53865-65

ACCESSION NR: AP5017241

2

ASSOCIATION: Institut po pererabotke nefti; Moscow Institute of Petroleum

Chemical Machine Building

Country:

USSR

Form:

FORM CODE: NP, MI

Card 2/2

AKHROMEYKO, A. I.

Methods of Determining Cyanamide and Its Derivatives. M.P.Vovk, E.S.Kogan,
and A.I. Akhromeyko. Zavodskaya Lab. 1933, No. 10, 8-11. A review.
S.U.E.

PROCESS AND PROPERTIES INDEX

5

CA

Comparison between the action of farm manure and inorganic fertilizers. A. I. Akhromelko. *Trans. Sci. Inst. Fertilizers (Moscow)* No. 107; 4-17(1933); *Chimie & Industrie* 31, 1201.—From the standpoint of crop yields there is very little difference between farm manure and inorg. fertilizers. The degree of utilization of N in the latter varies from 63 to 77%; in the former from 56 to 66%. Comparative studies of fresh and fermented manures over a period of 5 yrs. show that, though fresh manure has a clearly neg. effect during the 1st yr., its total effect is at least equal to, if not better than, that of fermented manure. Application of CaO along with manure or with inorg. fertilizers appreciably increases crop yield, both on podzol and on chernozem. On the whole, the crop yield on podzol is higher than on chernozem, in spite of the fact that the latter is richer in humus and in plant foods. Soil structure plays a larger part in the assimilation of food substances contained in both manure and fertilizers; e. g., when inorg. fertilizers are mixed uniformly with the soil, the crop yield on a pulverulent soil is equal to or slightly greater than that obtained on a lumpy soil; on the other hand, if the fertilizer is introduced from below, by means of a pipe, the yield is much larger on the pulverulent soil. Similarly, when manure is intimately mixed with the soil, no great difference is observed in the total result (over a 5-yr. period); but by applying fresh manure to a lumpy soil, there is a considerable decrease in crop yield during the 1st yr., which is not observed on pulverulent soils. In flax, several successive applications of fertilizer give a better result than the application of the same amt. of fertilizer at one time; no such improvement is noted with oats.

A. Papineau-Couture

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 7th ORDERS

PROCESSES AND PROPERTIES INDEX

15

CA

Causes of the negative action of fresh manure on crops.
 A. I. Akhromenko. *Trans. Sci. Inst. Fertilizers* (Moscow) No. 267, 18-30(1958); *Chimie & Industrie* 31, 1201-2.— Fermented manure considerably increases all crop yields; on the other hand, during the 1st yr., fresh manure mixed with straw increases crop yield only with Leguminosae, but produces a considerable decrease with Gramineae. This neg. effect is due to the fact that fresh manure does not produce denitrification during the 1st yr., the inorg. N of the soil being temporarily fixed by microorganisms. The neg. effect, however, ends after 3 months. When fermented manure is added to soil, there is an uninterrupted increase in nitrates, while with fresh manure there is first a considerable decrease (or even complete disappearance) of nitrates, which again begin to form and accumulate only at the end of 3 months. Alkalinization of the soil accelerates the cessation of the neg. effect of fresh manure; acidification retards it. Total N detn. in the soil treated with manure shows that the decrease or disappearance of nitrates does not involve a decrease in the N content, thus confirming the absence of denitrification under these conditions. A certain loss in total N

has been observed in sandy soils, but this seems to be due chiefly to volatilization of NH₃ after ammonification of the manure. When manure or inorg. fertilizers are added to ordinary soils, there is a strong and rapid physicochem. absorption of H₂O-sol. org. matter and H₂O-sol. P₂O₅; in sand, on the other hand, there is but a slight biol. absorption of these substances. Tests, however, carried out both on arable soils and on sand showed that both types of manure, irrespective of their degree of decompos., have K₂O and P₂O₅ contents amply sufficient for producing a good crop. There is therefore no scientific basis for the commonly held opinion that phosphate fertilizer should be applied simultaneously with manure.
 A. Papineau-Couture

A 58-31A METALLURGICAL LITERATURE CLASSIFICATION

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LIST AND TWO ORDERS PROCESSED AND PROPERTIES INDEX

15

A

Influence of the carbon-nitrogen ratio on the absorption of nitrogen by plants. A. I. Akhromenko. *Trans. Sci. Inst. Fertilizers* (Moscow) NO. 107, 30-8 (1935); *Chimia & Industrie* 31, 1935.--Investigations and tests on the influence of the C:N ratio on the assimilation of N by plants show that the assimilability of the N in vegetable products such as ground lupine seed, oat straw and seeds or manure, depends on both the N content and the chem. compn. of the resp. substances. Addn. of inorg. N to an org. substance can exert different effects on the crops, according to the compn. of the substance to which it is added; when the predominating constituents are difficultly sol. or completely insol., the extraneous N is more easily and more completely assimilated by the plant than when the org. substance contains a large proportion of sol. constituents. The assimilability by the plant of the P and K contained by the org. substance is inversely as the assimilability of the N; on the other hand, the soly. of the P and K in the org. substance decreases as its N content increases, i. e., as the assimilability of the N increases.

A. Papineau-Couture

ASS. S. A. METALLURGICAL LITERATURE CLASSIFICATION

15

Comparison between the action exerted on crops by moist and dried manure. A. I. Akhromeiko. *Trans. Sov. Inst. Fertilizers* (Moscow) No. 197:47-53(1933); *Chemie & Industrie* 31, 1202.—In order to obtain high efficiency from the addn. of manure it is not sufficient to ensure an adequate supply of plant food, CO₂, moisture for the roots, heat and light; it is essential also that the atm. contain sufficient water vapor. When the relative humidities of the atm. are low (resulting in increased evapn. from the plants) the time of the vegetative period is reduced, the assimilability of fertilizers in the soil decreases considerably and the general crop yield falls off very appreciably. Under such conditions even massive applications of fertilizers and increase in the moisture content of the soil do not improve growth. Other conditions being equal, by placing the plants in a moist atm., the duration of the vegetative period and the affinity of the soil for the fertilizers are increased and crop yield is increased considerably. The poor response of southern Russian chernozems to fertilizers is explained, less by the richness of these soils in plant foods, than by the dryness of the air in that region. It is legitimate to suppose that reforestation of that region would contribute to increasing the humidity of the air, to decreasing the wind velocity and the rate of evapn. in the plants, and consequently to increasing the crop yield and the response of the soil to fertilizing. A. P.-C.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS

COMMON VARIABLE INDEX

OPEN MATERIALS INDEX

FROM STEELMAKING

GROUPS

ISSUE

1930

1931

1932

1933

1934

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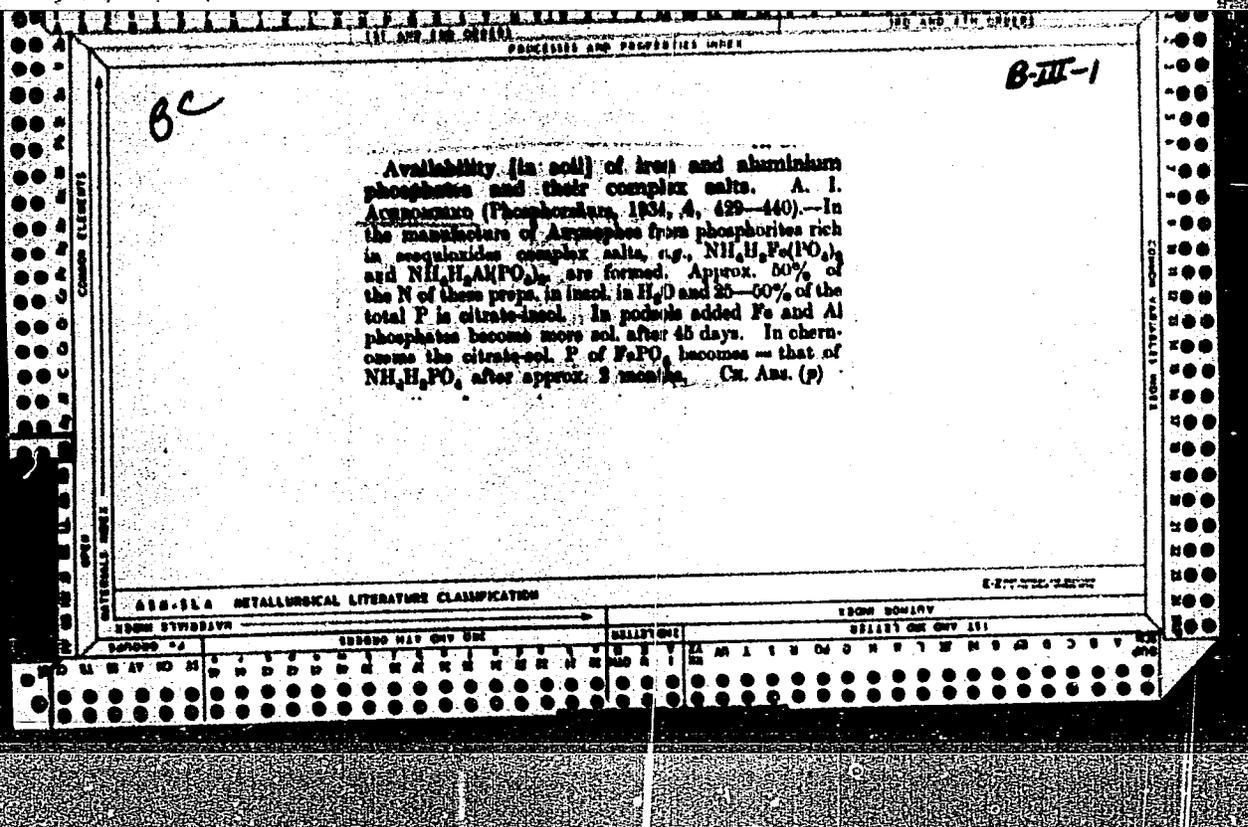
2016

2017

2018

2019

2020



PROCESSES AND PROPERTIES INDEX

15

The influence of silicic acid on the availability of phosphorus for plants. A. I. Akhromenko. *Trans. Sci. Inst. Fertilizers Insectofungicides (U. S. S. R.)* No. 126, 103-21 (1935); cf. *C. A.* 29, 874'. Silica sol and gel proved to be effective in the utilization of P_2O_5 from sol. and insol. salts (KH_2PO_4 , $AlPO_4$, and $FePO_4$) by plants grown in soln. cultures. The nutrients were in collodion bags with the plants grown outside, or the nutrients were outside and the plants grown in the collodion bags immersed in the soln. cultures. The movement of the P_2O_5 with mixes of SiO_2 from the collodion bags outside or from the outside into the bags does not indicate any Donnan equil. reactions. The SiO_2 addns. had no influence on the availability of N. Gels of $Al(OH)_3$, added in sand cultures with a standard nutrient soln., had no toxic effects; they decreased slightly the availability of P_2O_5 . Humic acid in the form of NH_4 humates increased the soly. of Fe and Al phosphates and the absorption of P by plants.

I. S. Ioffe

METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

15

Availability of phosphoric acid from iron and aluminum phosphates. A. I. Akhromelko. *Trens. Sci. Ind. Ferrous Insectifungicides* (U. S. S. R.) No. 126, 121-8 (1935).—The prepa. of Ammophos from phosphates rich in R_2O_3 gives complex NH_4 Fe phosphates. The P_2O_5 of these salts is less available to plants than that of the mech. mixt. of $NH_4H_2PO_4$ and $FePO_4$. The soly. (in 1% citric acid) of Fe and Al phosphates in the acid podsol soils decreases at first, but later (after 1.5 months) it increases, more for the Al than the Fe phosphate. In chernozem the soly. of the Al phosphate decreases slightly when added, but not that of the Fe phosphates.

J. S. Joffe

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

SERIALIZED ENTRY

COMMON ELEMENTS COMMON VARIABLE ELEMENTS

MATERIALS INDEX OPEN

SERIALS SUBJECTS RELATIONS SUBJECTS

1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX 3RD AND 4TH ORDERS

15

13

The effect of thermophosphates on crop yields. A. I. Akhromenko and M. M. Kalashnikova. *Tranz. Ser. Tsvet. Khim. Inst. of Inorganic Chem. U. S. S. R.* No. 141, 147-55 (1938); *Chem. Zentr.* 1940, I, 115. Thermophosphates, produced from apatites or phosphites by fusion with Na_2CO_3 or with a mixt. of Na_2CO_3 and K_2CO_3 , contain about 90-95% citrate-sol. P_2O_5 . The effect of thermophosphate is the same as that of superphosphate on chernozem, exhausted chernozem, and podzolic soils. It is superior to superphosphate on acid podzolic soils. On peat soils (lowland marshes) the mobility of the P_2O_5 of the phosphates is reduced as is also the availability for plants. This is due to the fixing of the P_2O_5 by the sesquioxides and Ca present in large units in peat soils.

M. G. Moore

METALLURGICAL LITERATURE CLASSIFICATION

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Effect of the principal forms of nitrogenous fertilizers on sugar-beet crops. A. I. Akhromenko. *Chemisation Socialiste Agr. (U. S. S. R.)* 2, No. 6, 68-61 (1939); *Chimie & Industrie* 44, 07 (1940). In gray, argillaceous, forest soils with low buffer power, and in podzolic soils having received acid K-P fertilization, best results are obtained with physiologically alk. nitrogenous fertilizers (KNO₃, NaNO₃). Next come NH₄NO₃, urea, Ca cyanamide and finally (NH₄)₂SO₄. In the same soils, in conjunction with K-P fertilization, the most favorable nitrogenous fertilizers are Norwegian saltpeter, NH₄NO₃, (NH₄)₂SO₄, while NaNO₃ is near the bottom of the list. In degraded chernozem soils possessing relatively high buffer power, the physiol. acidity or alk. of the fertilizers generally has no effect on the development of beets; Na exerts a pos. action, and NaNO₃ shows itself superior to the other fertilizers. This pos. action of Na would seem to be due to the fact that it stimulates absorption of K by the beets.

A. Papineau-Couture

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

Akhromeyko, A. I.

Doc Biolog Sci

Dissertation: "Physiological Analysis of the Drying of Pine Cultures(Using
Materials in Buzuluk Forest)."

11 July 49

Institute of Forestry, Academy Sci USSR

SO Vecheryaya Moskva
Sum 71, 2 Sep 52

AKHROMEYKO, A. I.

"The Role of Mycorrhiza in the Life of a Forest", Leshoye Khoz, (Forest Economy),
No. 5, pp 18-24, 1950.

1. AKHROMEYKO, A. I.
2. USSR (600)
4. Trees
7. Characteristics of the growth and development of arborescent plants.
Les. khoz., 6, No. 2, 1953.

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ZAKHAROV, P.S.; AKHROMYKO, A.I., redaktor; SARMATSKAYA, G.I., redaktor;
KOLESNIKOVA, A.P.; ~~redaktor~~ tekhnicheskii redaktor

[Using the suction strength of the tree crown in drying and
impregnating wood] Primenenie sosushchei sily krony dlia sushki i
propitki drevesiny. 2-e izd. ispr. i dop. Moskva, Goslesbumizdat,
1954. 41 p. (MLRA 7:10)

(Lumber--Drying)

AKHROMEYKO, A. I. and SHESTAKOVA, V. A.

"Role of Microorganisms in the Nourishment of Ligneous Plants," edited by
A. A. Imshenetskiy, Corresponding Member, Academy of Medical Sciences, USSR, Moscow,
Publishing House of the Academy of Sciences UBSR, 1955, 239 pp

Sum 1467

RUMANIA/Plant Physiology. Mineral Nutrition

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 86661

Author : Alhromeyko A.L., and Zhuravleva M.V.

Inst :

Title : One in a Collection of Articles on "The Application of
Isotopes in Agrochemical and Soil Research" The Absorption
of Mineral Nutrients in the Roots of Wood Plants

Orig Pub : AS USSR Press, 1955, pp 188-241

Abstract : No abstract

Card : 1/1

USSR/Physiology of Plants. Water Regimen

I-3

Abs Jour : Ref Zhur-Biologiya, No 2, 1958, 5666

Abstract : 15 min. on sunny days and 60 min. on cloudy days. Conclusions on the rapidity of the water flow were made on the basis of substances absorbed by the stem and leaves at definite periods of time. The rapidity of the flow in the xylem fluctuated between 0 to 10cm per minute in different kinds of trees; at an air temperature of 23-26° and with good light it was approximately twice as high as that at the temperature of 10-11° and poor light. The rapidity of the movement of heavy water and P³² was almost the same. During the summer months a reverse relationship between the moisture in the leaves and the rapidity of the water flow was established. In the evening and at the termination of the vegetation period the rapidity of the water flow considerably dropped.

Card 2/2

Country : USSR I
Category : Plant Physiology. Mineral Nutrition.
Abs Jour : Ref. Zhur.-Biologiya No. 11, 1950. No. 48534
Author :
Institu :
Title :
Orig. I :
Abstract : ash seedlings was lowered in comparison with the control (which was not enriched) through the biological fixation of the phosphorus fertilization; the biological absorption of phosphates was reduced with decreased environmental moisture. Reduction in the availability of P₁₂ did not affect plant growth. By the tenth day the plants had already consumed a substantial amount of the

AKHROMEYKO, A. I.

USSR / Forestry. Dendrology.

K-2

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24871.

Author : Akhromeiko, A. I.; Pankratova, N. M.; Napalkov, N. V.; Ovcharova, G. R.; Krainev, V. P.

Inst : Not given.

Title : Methods of Raising the Yield of the Oak.

Orig Pub: Sb. rabot po lesn. kh-vu. Vses. n.-i. in-t lesovodstva i mekhaniz. lesn. kh-va, 1956, vyp. 32, 200-216.

Abstract: With a view to raising the fruitification of oak in TatLOS, ShipLOS and BashLOS, thinning out of plantings to a thickness of 0.6-0.4 was carried out. It was established that thinning out of the

Card 1/2

USSR / Forestry. Forest Economy

K-3

Abs Jour: Ref Zhur-Biol., No 13, 1958, 58393

Author : Akhromeyko, A. I. , Gur'yanova, O. Z., Pankratova, N. M.

Inst : All-Union Scientific-Research Institute of Forestry and Mechanization of the Forest Economy

Title : The Influence of Various Doses of 2,4-D, 2, 4, 5-T, of 2,4-D Butyl Ether and of Sodium Pentachlorophenolate (PCP) on Gray Alder and of Gray Willow Shrubs.

Orig Pub: Byul. Nauchno-tekhn. inform. Vses n.-i. in-t les-ovodstva i mekhaniz. lesn. kh-va, 1957, No 4, 14-16

Abstract: It was established in experiments conducted in

Card 1/2

USSR / Forestry. Forest Economy

K-3

Abs Jour: Ref Zhur-Biol., No 13, 1958, 56394

Author : Akhromeyke, A.I., Gar'yanova, O.Z., Pankratova, N.H.

Inst : All-Union Scientific-Research Institute of Forestry and Mechanization of the Forest Economy

Title : The Influence of Various Doses of 2,4-D and of 2,4-D Butyl-Ether on Aspen and Birch

Orig Pub: Byul. nauchno-tekhn. inform. Vses. n.i. in-t les-ovodstva i mekhaniz. lesn. kh-va, 1957, No 4, 17-21

Abstract: The physiology department of the All Union Scientific Research Institute of Forest Mechanization conducted experiments in 1956 on the treatment of underbrush of aspen, birch, willow and other genera with preparations of 2,4-D and by 2,4-D butyl

Card 1/2

AKHROMEYKO A. I

USSR/Physiology of Plants. Water Regimen

I-3

Abs Jour : Ref Zhur-Biologiya, No 2, 1958, 5667

Author : A. I. Akhromeyko, M. V. Zhuravleva
Inst : All-Union Scientific Institute of Forestry
and Forestry Mechanization
Title : Investigation of the Rapidity of the Water
Flow in Trees

Orig Pub : Fiziol. rasteniy, 1957, 4, No 2, 164-170

Abstract : Solutions of P^{32} , I^{131} , S^{35} (activity from
0:5-0:1 to 2-10 μ curie (ml), as well as heavy
water (12.5%) were introduced into the stems,
roots (by injection or immersion) or into leaves
(by moistening) of clear leaf maple, common oak,
warted birch, aspen, common fir, and green ash.
In the 1-3 year old seedlings (grown in sandy me-
dia) the rising water travelled through the

Card 1/2

K-1

USSR / Forestry. General Problems.

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43893

Author : Voropanov, P. V., Alkhromeyko, A. I.

Inst : Bryansk Forestry Institute

Title : The Effect of the Condition of Maternal Spruce
Trees at Different Stages on the Heredity of
Their Offspring. (Results of Studies Utilizing
Tagged Atoms)

Orig Pub: Tr. Bryanskogo lesokhoz. in-ta, 1957, 8, 87-103

Abstract: This article describes studies (1954-1955) of P uptake by the sprouts from pine and spruce seeds, 3-week old seedlings of these species and 2-year old spruce seedlings. The purpose of the study

Card 1/3

A. I. AKHROMEYKO, (V. A. Shestakova)

"THE ROLE OF RHIZOSPHERIC MICROORGANISMS IN NUTRITION OF FOREST PLANTS"

by A. I. Akhromeyko, V. A. Shestakova

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept 1958

AKHROMEYKO, A. I.

COUNTRY : USSR K
CATEGORY : Forestry. Forest Biology and Typology.
RES. JOUR. : RZhBiol., No. 9 1959, No. 10744
AUTHOR : Akhromeyko, A. I.
INST. : All-Union Scientific Research Institute of Forest *)
TITLE : Physiological Basis for Raising the Productivity of
Forests.
ORIG. PUB. : Lesn. kh-vo., 1958, No. 5, 10-16
ABSTRACT : Results of the experiments carried out at the Physiology
Laboratory VNIIM (All-Union Scientific Research Institute
of Forest Improvement) are set forth. One-year spruce
seedlings hardly assimilate any P incorporated into the
soil. Seedlings of linden, green ash, Norway maple and
ash-leaved maple, utilize up to 80% of P. The greatest
effect is obtained when labeled P_c and organic fertilizer
are placed 3-5 centimeters below the planting depth of the
seeds. Upon the application of top-dressing with addi-
tional nutrients, there was discovered the ability of the
plants to secrete nutrients into the soil, these nutrients
being again absorbed by the roots of the same or other

*) Improvement.

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No. 10744

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : plants. Top-dressing with additional phosphorus nutrients increases their growth by 25-50%. Supplementary root feeding proved to be less effective. The rhizosphere micro-organisms feed chiefly on the root secretions of the plants and absorb in this feeding tens of times more N, P and S than the plants, concentrating them in organic form in the region of physiologically active roots. In the presence of moisture deficiency, there takes place the dying-off of micro-organisms and physiologically active roots. The amount of humus, total N and total P increases in the rhizosphere in draughty periods. It is

CARD: 2/4

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No. 10744
INSTITUTE :
TITLE :

ORIG. PUBL. :

ABSTRACT : root system, through the leaves, and through the wood and
bark of the trunk. — V. I. Klimov

CARD:

AKHROMEYKO, A.I.; SHESTAKOVA, V.A.

Role of micro-organisms in the absorption and secretion of phosphorus and sulfur by oak, ash and maple seedlings [with summary in English]. Mikrobiologiya 27 no.1:67-74 Ja-F '58. (MIRA 11:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lesovodstva i mekhanizatsii lesnogo khozyaystva.
(RHIZOSPHERE MICROBIOLOGY) (TREES) (PLANTS--ASSIMILATION)

A KHPOMEYKO, A. I.

PLANK I. BOOK EXPLANATION 807/213

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958. Booklet available whereby; publication of preliminary report (Report of Soviet Scientists); Production and Application of Isotopes Moscow, Atomizdat, 1959. 368 p. (Series: IIA; Study, vol. 6) 8,000 copies printed.

Eds. (this year): G.V. Kuznetsov, Academician, and I.I. Borik, Corresponding Member, USSR Academy of Sciences; Ed. (initial book): I.S. Akhmetov, Tech. ZIL; Z.S. Akhmetov.

PURPOSE: This book is intended for scientists, engineers, physicists, and biologists engaged in the production and application of isotopes. It contains material most useful for producers and scientists and for the higher technical schools where nuclear sciences are being taught. The general public interested in atomic science will appreciate.

COMMENT: This is volume 6 of a 6-volume set of reports collected by Soviet scientists at the Special International Conference on the Peaceful Uses of Atomic Energy held in Geneva from September 2 to 14, 1958. Volume 6 contains 22 reports on: 1) Isotopes in the field of medicine; 2) Isotopes in agriculture; 3) Isotopes in industry; 4) Isotopes in the field of biology; 5) Isotopes in the field of geology; 6) The effect of isotopes on the environment; 7) Isotopes in the field of physics; 8) Isotopes in the field of chemistry; 9) Isotopes in the field of biology; 10) Isotopes in the field of geology; 11) Isotopes in the field of physics; 12) Isotopes in the field of chemistry; 13) Isotopes in the field of biology; 14) Isotopes in the field of geology; 15) Isotopes in the field of physics; 16) Isotopes in the field of chemistry; 17) Isotopes in the field of biology; 18) Isotopes in the field of geology; 19) Isotopes in the field of physics; 20) Isotopes in the field of chemistry; 21) Isotopes in the field of biology; 22) Isotopes in the field of geology.

- 16. Kuznetsov, G.V., V.I. Kuznetsov, and V.I. Ginzburg. Conalt sources of High Intensity for Radiative Action (Report No. 224) 200
- 17. Gusev, N.G., Ye. Ye. Krasnov, and V.I. Petrov. Czech Radiation Dose and Outside Extended Sources (Report No. 208) 211
- 18. Agapov, E.L., M.A. Dol, V.Y. Zakharenko, Ye.G. Gribchen, G.Y. Zakharenko, and E.A. Pechenkin. Spectroscopy of Radiocesium Measurement of Industrial Isotopes (Report No. 207) 217
- 19. Agapov, E.L., V.P. Kaschik, V.T. Mitrofanov, and V.Y. Zakharenko. Application of Radiocesium Spectroscopy Methods to Beta and Gamma-ray Isotopes (Report No. 203) 227
- 20. Kuznetsov, G.V., V.I. Ginzburg, and V.S. Kuznetsov. Instrument for Measuring Small Streams of Radioactive Substances (Report No. 205) 233
- 21. Gusev, N.G., V.I. Kuznetsov, and V.A. Kuznetsov. Measurement of Radioactive Substances (Report No. 213) 243
- 22. Kuznetsov, G.V., V.I. Ginzburg, and G.A. Semikhov. Photosynthesis Studies by Quantitative Radiocentric Methods (Report No. 215) 250
- 23. Kuznetsov, G.V., and A.V. Kravtsov. Studying the Transfer, Distribution, and Transformation of Certain Physiologically Active Compounds in Plants (Report No. 213) 274
- 24. Gusev, N.G., Ye. Ye. Krasnov, and A.Ye. Petrov-Ginzburg. Effects of Absorption and Secretion in Roots (Report No. 223) 285
- 25. Akhmetov, I.S., and V.A. Shcherbakov. Effect of the Mitochondrial Micro-organisms on the Absorption and Secretion of Phosphorus and Sulfur by the Seedling Roots of Woody Plants (Report No. 231) 286
- 26. Kuznetsov, G.V., and N.B. Prokofiev. Absorption of Phosphorus Tracers by Cultivated Plants in Relation to Their Resistance to Cold (Report No. 233) 293
- 27. Kuznetsov, G.V., A.V. Kravtsov, V.A. Malchukova, and A.V. Zakharenko. Some Results of Using Radiocentric Isotopes for Plant Protection (Report No. 209) 302
- 28. Kuznetsov, G.V., and V.I. Ginzburg. The Use of Radiocentric Isotope Method (Report No. 235) 309

SAVINA, Anna Vasil'yevna; AKHROMEYKO, A.I., red.; CHUGUNOVA, Z.S.,
red.izd-va; PARAKHINA, N.L., tekhn.red.

[Physiological basis for improvement cuttings] Fiziologi-
cheskoe obosnovanie rubok ukhoda. 2., dop. izd. Moskva,
Goslesbumizdat, 1961. 97 p. (MIRA 15:5)
(Forest management)

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Effect of gibberellin on growth and translocation of substances
in arboraceous plants. Izv. AN SSSR. Ser. biol. 26 no.1:79-82
Ja-F '61. (MIRA 14:3)

1. Laboratory of Physiology, the Union Institute of Forestry
and Mechanization, Pushkin city, Moscow District.
(GIBBERELLINS) (TREES---PHYSIOLOGY)
(PLANTS, MOTION OF FLUIDS IN)

AKHROMENKO, A. I.

"The Role of Root Secretions in the Nutrition of Aroraceous Plants"
To be presented at the Symposium on the Use of Radioisotopes in
Soil-Plant Nutrition Studies, Bombay, 26 February - 2 March 1962

All-Union Forestry and Forest Mechanization Research Institute, USSR.